This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-39. (canceled)

40. (Previously presented) A purified polypeptide comprising the amino acid sequence of SEQ ID NO:5.

41. (Previously presented) The purified polypeptide of claim 40 wherein said polypeptide is recombinantly produced.

42-44. (Canceled)

45. (Currently amended) A purified polypeptide comprising ~~at least ten contiguous amino acids of~~ amino acids 750-977 of the amino acid sequence of SEQ ID NO:5~~, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:10 and six contiguous asparagine residues~~.

46-53. (Canceled)

54. (Currently amended) An immunogenic composition comprising an immunologically effective amount of a recombinant polypeptide, which recombinant polypeptide comprises ~~at least ten contiguous amino acids of~~ amino acids 750-977 of the amino acid sequence of SEQ ID NO:5~~, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:10 and six contiguous asparagine residues~~.

55-56. (Canceled)

57. (Currently amended) An immunogenic composition comprising an immunologically effective amount of a first purified ~~recombinant~~ polypeptide, which first ~~recombinant~~ polypeptide comprises at least ten contiguous amino acids of the amino acid sequence of SEQ ID NO:5, wherein said first polypeptide comprises ~~includes~~ at least one of

the amino acid sequences selected from the group consisting of SEQ ID NO:9, SEQ ID NO:10, and six contiguous asparagine residues, and an immunologically effective amount of a second polypeptide, which second polypeptide comprises at least ten contiguous amino acids of *Helicobacter pylori* heat shock protein, wherein said heat shock protein comprises ~~having~~ the amino acid sequence of SEQ ID NO:6.

58. (Canceled)

59. (Currently amended) The immunogenic composition of claim 57 wherein said second polypeptide comprises at least fifteen contiguous amino acids of the *Helicobacter pylori* heat shock protein, wherein said heat shock protein comprises ~~having~~ the amino acid sequence of SEQ ID NO:6.

60-61. (Canceled)

62. (Currently amended) A method of preparing an immunogenic composition comprising bringing into association:

(1) an immunologically effective amount of a purified polypeptide, which polypeptide comprises ~~at least ten contiguous amino acids of~~ amino acids 750-977 of the amino acid sequence of SEQ ID NO:5~~, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:10 and six contiguous asparagine residues~~, and

(2) a pharmaceutically acceptable carrier.

63. (Currently amended) A method of preparing an immunogenic composition comprising:

bringing into association (1) an immunologically effective amount of a first purified polypeptide, which first polypeptide comprises at least ten contiguous amino acids of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide ~~includes~~comprises at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:9, SEQ ID NO:10, and six contiguous asparagine residues, and (2) a pharmaceutically acceptable carrier, and

adding an immunologically effective amount of a second purified polypeptide, which second polypeptide comprises at least ten contiguous amino acids of *Helicobacter pylori* heat shock protein, wherein said heat shock protein comprises ~~having~~ the amino acid sequence of SEQ ID NO:6.

64-67. (Canceled)

68. (Previously presented) The purified polypeptide of claim 45, wherein said polypeptide is recombinantly produced.

69. (Canceled)

70. (Currently amended) An immunogenic composition comprising an immunologically effective amount of a first purified ~~recombinant~~ polypeptide, which first~~recombinant~~ polypeptide comprises at least ten contiguous amino acids of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide comprises~~includes~~ at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:9, SEQ ID NO:10, and six contiguous asparagine residues, and an immunologically effective amount of a second polypeptide, wherein said second polypeptide comprises at least ten contiguous amino acids of *Helicobacter pylori* cytotoxin (CT) protein, wherein said CT protein comprises ~~having~~ the amino acid sequence of SEQ ID NO:3.

71-77. (Canceled)

78. (Currently amended) The method of claim 62 wherein said purified polypeptide is ~~A method of preparing an immunogenic composition comprising bringing into association: (1) an immunologically effective amount of~~ a recombinant polypeptide~~, which recombinant polypeptide comprises at least ten contiguous amino acids of amino acids 750-977 of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:10 and six contiguous asparagine residues, and (2) a pharmaceutically acceptable carrier~~.

79. (Canceled)

80. (Currently amended) The immunogenic composition of claim 70 wherein said second polypeptide comprises at least fifteen contiguous amino acids of the *Helicobacter pylori* CT protein, wherein said CT protein comprises ~~having~~ the amino acid sequence of SEQ ID NO:3.

81. (Currently amended) An isolated immunogenic polypeptide comprising a *Helicobacter pylori* cytotoxin associated immunodominant antigen (CAI) comprising ~~at least five contiguous amino acids from~~ amino acids 750-977 of the amino acid sequence of SEQ ID NO:5~~, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:10 and six contiguous asparagine residues~~.

82-87. (Canceled)

88. (Previously presented) The polypeptide of claim 81, wherein said polypeptide is a recombinant polypeptide.

89-122. (Canceled)

123. (Currently amended) An isolated immunogenic polypeptide encoded by a polynucleotide sequence comprising ~~at least fifteen contiguous nucleotides of~~ nucleotides 2782-3466 of the nucleotide sequence of SEQ ID NO:4.

124-125. (Canceled)

126. (Currently amended) An isolated immunogenic polypeptide ~~encoded by at least fifteen contiguous nucleotides of the nucleotide sequence of SEQ ID NO:4~~ comprising *Helicobacter pylori* cytotoxin associated immunodominant (CAI) antigen having the amino acid sequence of SEQ ID NO:5, wherein said polypeptide is encoded by at least fifteen contiguous nucleotides of the nucleotide sequence of SEQ ID NO:4.

127. (Previously presented) An isolated immunogenic polypeptide encoded by the polynucleotide sequence of SEQ ID NO:4.

128. (Previously presented) The polypeptide of claim 126, wherein said polypeptide is a recombinant polypeptide.

129-139. (Canceled)

140. (Currently amended) The method of claim 63 wherein said first purified polypeptide is ~~A method of preparing an immunogenic composition comprising~~

~~bringing into association an immunologically effective amount of~~ a recombinant polypeptide~~, which recombinant polypeptide comprises at least ten contiguous amino acids of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:9, SEQ ID NO:10, and six contiguous asparagine residues, and a pharmaceutically acceptable carrier, and~~

~~adding an immunologically effective amount of a second polypeptide, which second polypeptide comprises at least ten contiguous amino acids of *Helicobacter pylori* heat shock protein having the amino acid sequence of SEQ ID NO:6~~.

141. (New) An immunogenic composition comprising an immunologically effective amount of a polypeptide comprising amino acids 750-977 of the amino acid sequence of SEQ ID NO:5.

142. (New) An immunogenic composition comprising an immunologically effective amount of a first polypeptide, wherein said first polypeptide comprises amino acids 750-977 of the amino acid sequence of SEQ ID NO:5, and an immunologically effective amount of a second polypeptide, which second polypeptide comprises at least ten contiguous amino acids of *Helicobacter pylori* heat shock protein, wherein said heat shock protein comprises the amino acid sequence of SEQ ID NO:6.

143. (New) The immunogenic composition of claim 142 wherein said heat shock protein comprises the amino acid sequence of SEQ ID NO:6.

144. (New) The immunogenic composition of claim 142 wherein said heat shock protein is a recombinant polypeptide.

145. (New) The immunogenic composition of claim 142 wherein said first polypeptide comprises the amino acid sequence of SEQ ID NO:5.

146. (New) The immunogenic composition of claim 142 wherein said first polypeptide is a recombinant polypeptide.

147. (New) An immunogenic composition comprising an immunologically effective amount of a first polypeptide, wherein said first polypeptide comprises amino acids 750-977 of the amino acid sequence of SEQ ID NO:5, and an immunologically effective amount of a second polypeptide, which second polypeptide comprises at least ten contiguous amino acids of *Helicobacter pylori* cytotoxin protein, wherein said cytotoxin protein comprises the amino acid sequence of SEQ ID NO:3.

148. (New) The immunogenic composition of claim 147 wherein said cytotoxin protein comprises the amino acid sequence of SEQ ID NO:3.

149. (New) The immunogenic composition of claim 147 wherein said first polypeptide comprises the amino acid sequence of SEQ ID NO:5.

150. (New) The immunogenic composition of claim 147 wherein said cytotoxin protein is a recombinant polypeptide.

151. (New) The immunogenic composition of claim 147 wherein said first polypeptide is a recombinant polypeptide.

152. (New) The immunogenic composition of claim 54 wherein said recombinant polypeptide comprises the amino acid sequence of SEQ ID NO:5.

153. (New) The method of claim 62 wherein said polypeptide comprises the amino acid sequence of SEQ ID NO:5.

154. (New) A method of preparing an immunogenic composition comprising bringing into association (1) an immunologically effective amount of a purified first polypeptide, which first polypeptide comprises amino acids 750-977 of the amino acid sequence of SEQ ID NO:5 and (2) an immunologically effective amount of a second polypeptide, which second polypeptide comprises at least ten contiguous amino acids of *Helicobacter pylori* cytotoxin protein, wherein said cytotoxin protein comprises the amino acid sequence of SEQ ID NO:3.

155. (New) The method of claim 154 wherein said cytotoxin protein comprises the amino acid sequence of SEQ ID NO:3.

156. (New) The immunogenic composition of claim 154 wherein said first polypeptide comprises the amino acid sequence of SEQ ID NO:5.

157. (New) The immunogenic composition of claim 154 wherein said cytotoxin protein is a recombinant polypeptide.

158. (New) The immunogenic composition of claim 154 wherein said first polypeptide is a recombinant polypeptide.

159. (New) A method of preparing an immunogenic composition comprising bringing into association (1) an immunologically effective amount of a purified first polypeptide, which first polypeptide comprises amino acids 750-977 of the amino acid sequence of SEQ ID NO:5 and (2) an immunologically effective amount of a second polypeptide, which second polypeptide comprises at least ten contiguous amino acids of *Helicobacter pylori* heat shock protein, wherein said heat shock protein comprises the amino acid sequence of SEQ ID NO:6.

160. (New) The method of claim 159 wherein said heat shock protein comprises the amino acid sequence of SEQ ID NO:6.

161. (New) The method of claim 159 wherein said heat shock protein is a recombinant polypeptide.

162. (New) The method of claim 159 wherein said first polypeptide comprises the amino acid sequence of SEQ ID NO:5.

163. (New) The method of claim 159 wherein said first polypeptide is a recombinant polypeptide.

164. (New) The immunogenic composition of claim 57 wherein said first polypeptide is a recombinant polypeptide.

165. (New) The immunogenic composition of claim 57 wherein said second polypeptide is a recombinant polypeptide.

166. (New) The immunogenic composition of claim 57 wherein said second polypeptide comprises the amino acid sequence of SEQ ID NO:6.

167. (New) The immunogenic composition of claim 70 wherein said first polypeptide is a recombinant polypeptide.

168. (New) The immunogenic composition of claim 70 wherein said second polypeptide is a recombinant polypeptide.

169. (New) The immunogenic composition of claim 70 wherein said second polypeptide comprises the amino acid sequence of SEQ ID NO:3.

170. (New) A method of preparing an immunogenic composition comprising: bringing into association an immunologically effective amount of a purified polypeptide, which polypeptide comprises at least ten contiguous amino acids of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide comprises at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:9, SEQ ID NO:10, and six contiguous asparagine residues, and a pharmaceutically acceptable carrier.

171. (New) The method of claim 170 wherein said purified polypeptide is a recombinant polypeptide.

172. (New) A method of preparing an immunogenic composition comprising: bringing into association an immunologically effective amount of a first purified polypeptide, which polypeptide comprises at least ten contiguous amino acids of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide comprises at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:9, SEQ ID NO:10, and six contiguous asparagine residues, and an immunologically effective amount of a second purified polypeptide, which second polypeptide comprises at least ten contiguous amino acids of *Helicobacter pylori* heat shock protein, wherein said heat shock protein comprises the amino acid sequence of SEQ ID NO:6.

173. (New) The method of claim 172 wherein said first polypeptide is a recombinant polypeptide.

174. (New) The method of claim 172 wherein said second polypeptide is a recombinant polypeptide.

175. (New) The method of claim 172 wherein said second polypeptide comprises the amino acid sequence of SEQ ID NO:6.

176. (New) A method of preparing an immunogenic composition comprising: bringing into association an immunologically effective amount of a first purified polypeptide, which polypeptide comprises at least ten contiguous amino acids of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide comprises at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:9, SEQ ID NO:10, and six contiguous asparagine residues, and an immunologically effective amount of a second purified polypeptide, which second polypeptide comprises at least ten contiguous amino acids of *Helicobacter pylori* cytotoxin protein, wherein said cytotoxin protein comprises the amino acid sequence of SEQ ID NO:3.

177. (New) The method of claim 176 wherein said first polypeptide is a recombinant polypeptide.

178. (New) The method of claim 176 wherein said second polypeptide is a recombinant polypeptide.

179. (New) The method of claim 176 wherein said second polypeptide comprises the amino acid sequence of SEQ ID NO:3.

180. (New) The method of claim 63 wherein said second purified polypeptide is a recombinant polypeptide.